

## REMARKS

### A. Background

Claims 1-19 were pending in the application at the time of the Office Action. Claims 1, 2, 4, 5, 8-10 and 15 were rejected as being obvious over cited art. Claims 3, 6, 7, 11-14 and 16-19 were objected to as being dependent on a rejected base claim. By this response applicant has amended claims 1, 8, 14, 15, and 19; and added new claim 20. As such, claims 1-20 are presented for the Examiner's consideration in light of the following remarks.

### B. Amendments to the Claims

Applicant has herein amended various paragraphs of the specification to correct typographical errors. Applicant has also herein amended claims 1, 8, 14, 15, and 19 to further clarify, more clearly define, and/or broaden the claimed inventions to expedite receiving a notice of allowance. For example, claims 1 and 15 have been amended to recite that the signal processing means and step of calculating each calculate an averaged Q value by using averages and standard deviations for distributions of the signal amplitude values of the mark and space parts; claims 14 and 19 have been amended to reflect the corrections made to the specification. In addition, amendments have been made to various claims to remedy formal matters. The amendments to the claims are supported in the application at least by paragraphs [0018] and [0043] – [0048] of the specification as originally filed.

Furthermore, new claim 20 has been added, which is claim 6, rewritten in independent format to incorporate the limitations of prior independent claim 1 from which claim 6 previously depended.

In view of the foregoing discussion, applicant submits that the amendments to the specification and claims do not introduce new matter and entry thereof is respectfully requested.

### C. Rejection Based on 35 U.S.C. § 103

Paragraphs 1 and 2 of the Office Action reject claims 1, 2, 4, 5, 8-10 and 15 under 35 U.S.C. § 103(a) as being obvious over an article entitled, "*Simple Q factor monitoring for BER estimation using opened eye diagrams captured by high speed asynchronous electro-optical sampling*" by Kawanishi et al. ("Kawanishi") in view of U.S. Publication No. 2007/0062162 to Kikuchi ("Kikuchi") and U.S. Publication No. 2004/0190899 to Torii et al. ("Torii"). Applicant respectfully traverses this rejection and submits that in view of amendments made herein, the cited references,

taken individually or combined, do not include each and every limitation recited in the claims. Of the rejected claims, claims 1 and 15 are independent claims.

Independent claims 1 and 15 have been amended herein to further define the manner in which the averaged Q value is calculated. Specifically, claim 1 now requires that the signal processing means “calculates, by using the sampling data, averages  $\mu_0$  and  $\mu_1$  and standard deviations  $\sigma_0$  and  $\sigma_1$  for two distributions of signal amplitude values that are mark part and space part, and calculates the averaged Q value as an optical quality parameter of the optical signal using the calculated averages  $\mu_0$  and  $\mu_1$  and standard deviations  $\sigma_0$  and  $\sigma_1$ ,” and claim 15 recites similar language in a corresponding method claim. Applicant submits that none of *Kawanishi*, *Kikuchi*, or *Torii* disclose or suggest these added limitations in conjunction with the other limitations recited in amended claims 1 and 15. As such, any alleged combination of *Kawanishi*, *Kikuchi*, and *Torii* would also not include the above limitations. Accordingly, Applicant respectfully requests that the obviousness rejection with respect to claims 1 and 15 be withdrawn.

Claims 2, 4, 5, and 8-10 depend from claim 1 and thus incorporate the limitations thereof. As such, applicant submits that claims 2, 4, 5, and 8-10 are distinguished over the cited art for at least the same reasons as discussed above with regard to claim 1. Accordingly, Applicant respectfully requests that the obviousness rejection with respect to claims 2, 4, 5, and 8-10 also be withdrawn.

#### D. Allowable Subject Matter

Paragraph 3 of the Office Action objects to claims 3, 6, 7, 11-14 and 16-19 as being dependent upon a rejected base claim, but states that those claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As noted above, claim 20 has been added, which is claim 6 rewritten in independent format to incorporate the limitations of the claims from which claim 6 previously depended. As such, Applicant submits that claim 20 is in allowable condition.

Regarding claims 3, 7, 11-14 and 16-19, in view of the discussion set forth herein, Applicant declines to rewrite those claims in independent form at this time, but reserves the right to do so in the future if so desired by the Applicant.

In connection with the foregoing, Applicant respectfully notes that an objection, by definition, concerns only the form of the claim(s) (as distinguished from the substance of the claim) with respect to which the objection has been posed. *See MPEP §§ 706.01, 608.01(n)* (emphasis

added). Thus, simply rewriting a dependent claim in the manner suggested by the Examiner constitutes only a change to the format of the claim and, without more, has no effect with regard to the substance of the rewritten claim.

Accordingly, because claim 20 simply incorporates the limitations of claim 6 and the claims from which that claim previously depended, Applicant respectfully submits that no change has been made herein to the substance of prior claim 6 (new claim 20) and, further, that claim 20 is in condition for allowance.

No other objections or rejections are set forth in the Office Action.

E. Conclusion

Applicant notes that this response does not discuss every reason why the claims of the present application are distinguished over the cited art. Most notably, applicant submits that many if not all of the dependent claims are independently distinguishable over the cited art. Applicant has merely submitted those arguments which it considers sufficient to clearly distinguish the claims over the cited art.

In view of the foregoing, applicant respectfully requests the Examiner's reconsideration and allowance of claims 1-20 as amended and presented herein.

The Commissioner is hereby authorized to charge payment of any of the following fees that may be applicable to this communication, or credit any overpayment, to Deposit Account No. 23-3178: (1) any filing fees required under 37 CFR § 1.16; (2) any patent application and reexamination processing fees under 37 CFR § 1.17; and/or (3) any post issuance fees under 37 CFR § 1.20. In addition, if any additional extension of time is required, which has not otherwise been requested, please consider this a petition therefor and charge any additional fees that may be required to Deposit Account No. 23-3178.

In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Dated this 8th day of September 2009.

Respectfully submitted,

/Scott A. Woodbury/ Reg. #55743

SCOTT A. WOODBURY

Registration No. 55,743

DANA L. TANGREN

Registration No. 37,246

Attorneys for Applicant

Customer No. 022913

Telephone No. 801.533.9800

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